

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A method of executing tasks in a multi-processor system, comprising:

executing a device driver to select a processor to execute an interrupt handler task
wherein said device driver executing includes a first monitoring of usage of a plurality of processors in said system and selecting, as a function of said first monitoring, a processor as the currently selected processor to execute an interrupt handler task; and

executing an operating system scheduler to assign an interrupt handler task to said processor selected by said device driver.

2. (original) The method of claim 1 further comprising operating the processor selected by said device driver and assigned by said operating system scheduler to execute an interrupt handler task in response to an interrupt.

3. (cancelled)

4. (currently amended) The method of claim 1 3 wherein said device driver executing includes a second monitoring of usage of a plurality of processors in said system and selecting, as a function of said second monitoring, either the currently selected processor or a different processor to execute an interrupt handler task.

5. (original) The method of claim 4 wherein said device driver executing includes identifying the processor with the lowest usage, comparing the usage of the lowest usage processor to the usage of the currently selected processor and selecting the lowest usage processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor.

6. (original) The method of claim 4 wherein said device driver executing includes identifying the processor with the lowest usage, comparing the usage of the lowest usage processor to the usage of the currently selected processor and selecting the lowest usage processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor by a predetermined margin of usage.

7. (original) The method of claim 4 wherein said device driver executing includes selecting the currently selected processor to execute an interrupt handler task if the usage of the currently selected processor is the lowest.

8. (original) The method of claim 5 wherein said device driver executing includes selecting the currently selected processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor by less than a predetermined margin of usage.

9. (currently amended) A system in communication with data storage, comprising:
a plurality of processors;
a storage controller adapted to manage Input/Output (I/O) access to the data storage;
a device driver capable of execution by at least one processor to select one processor to execute an interrupt handler task wherein said device driver executing includes a first monitoring of usage of a plurality of processors in said system and selecting, as a function of said first monitoring, a processor as the currently selected processor to execute an interrupt handler task;
and

an operating system scheduler capable of execution by at least one processor to assign an interrupt handler task to said processor selected by said device driver.

10. (original) The system of claim 9, further comprising:
an interrupt handler task capable of execution by the selected processor in response to an interrupt.

11. (cancelled)

12. (currently amended) The system of claim 9-11 wherein said device driver is capable of execution by at least one processor to subsequently monitor usage of a plurality of processors in said system and to select, as a function of said subsequent monitoring, either the currently selected processor or a different processor to execute an interrupt handler task.

13. (original) The system of claim 12 wherein said device driver is capable of execution by at least one processor to identify the processor with the lowest usage, to compare the usage of the lowest usage processor to the usage of the currently selected processor and to select the lowest usage processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor.

14. (original) The system of claim 12 wherein said device driver is capable of execution by at least one processor to identify the processor with the lowest usage, to compare the usage of the lowest usage processor to the usage of the currently selected processor and to select the lowest usage processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor by a predetermined margin of usage.

15. (original) The system of claim 12 wherein said device driver is capable of execution by at least one processor to select the currently selected processor to execute an interrupt handler task if the usage of the currently selected processor is the lowest.

16. (original) The system of claim 13 wherein said device driver is capable of execution by at least one processor to select the currently selected processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor by less than a predetermined margin of usage.

17. (currently amended) An article of manufacture including a device driver, wherein the device driver executes in an operating system having an operating system scheduler and

interrupt task handler, capable of executing tasks in a multi-processor system, wherein the device driver causes operations to be performed, the operations comprising:

selecting a processor to execute an interrupt handler task wherein said device driver selecting includes a first monitoring of usage of a plurality of processors in said system and selecting, as a function of said first monitoring, a processor as the currently selected processor to execute an interrupt handler task, wherein the operating system schedule assigns the interrupt handler task to said processor selected by said device driver.

18. (cancelled)

19. (currently amended) The article of manufacture of claim 17 48 wherein said device driver operations include a second monitoring of usage of a plurality of processors in said system and selecting, as a function of said second monitoring, either the currently selected processor or a different processor to execute an interrupt handler task.

20. (original) The article of manufacture of claim 19 wherein said device driver operations include identifying the processor with the lowest usage, comparing the usage of the lowest usage processor to the usage of the currently selected processor and selecting the lowest usage processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor.

21. (original) The article of manufacture of claim 19 wherein said device driver operations include identifying the processor with the lowest usage, comparing the usage of the lowest usage processor to the usage of the currently selected processor and selecting the lowest usage processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor by a predetermined margin of usage.

22. (original) The article of manufacture of claim 19 wherein said device driver operations include selecting the currently selected processor to execute an interrupt handler task if the usage of the currently selected processor is the lowest.

23. (original) The article of manufacture of claim 20 wherein said device driver operations include selecting the currently selected processor to execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage processor by less than a predetermined margin of usage.